Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- (Currently Amended) A modified Staphylococcal enterotoxin B (SEB) having a reduced reactivity with a neutralizing antibody to SEB (anti-SEB antibody) and being soluble in water.
- 2. (Original) The modified SEB of claim 1 wherein the reactivity with the anti-SEB antibody was reduced by introducing arbitrary amino acid substitution in the amino acid sequence of SEB
- 3. (Original) The modified SEB of claim 2 wherein the amino acid substitution was introduced at an epitope recognition site of the anti-SEB antibody in the amino acid sequence of SEB.
- 4. (Currently Amended) The modified SEB of claim 2 wherein the amino acid substitution was introduced within a region from Lys at 226-position to Lys at 229-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1.

- 5. (Currently Amended) The modified SEB of claim 4 wherein the amino acid sequence of from 226-position to 229-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1 is Leu Phe Ala Ala.
- 6. (Currently Amended) The modified SEB of claim 4 wherein the amino acid sequence of from 226-position to 229-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1 is Ala Thr Thr Gln.
- 7. (Currently Amended) The modified SEB of claim 4 wherein the amino acid sequence of from 226-position to 229-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1 is Lys Arg Ile Ile.
- 8. (Currently Amended) The modified SEB of claim 1 wherein Asn at 23-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1 is substituted with Tyr.
- 9. (Currently Amended) A-prophylactic/remedy treatment composition comprising

as an active ingredient the modified SEB as set forth in claim 1,

wherein said-prophylactic/remedy treatment composition
provides a reduced immunological response to SEB and an inhibitory
activity to T cell activation,

said-prophylactic/remedy_treatment composition being in
a form adapted for immunopathy.

Claim 10 (Cancelled).

- 11. (Currently Amended) The prophylactic/remedy for immunopathy of claim 22 claim 9 or 10 wherein said form is a form for oral administration.
- 12. (Currently Amended) The modified SEB of claim 2 wherein Asn at 23-position in the amino acid sequence of SEB \underline{as} shown in SEQ ID NO: 1 is substituted with Tyr.
- 13. (Currently Amended) The modified SEB of claim 3 wherein Asn at 23-position in the amino acid sequence of SEB \underline{as} shown in SEQ ID NO: 1 is substituted with Tyr.
- 14. (Currently Amended) The modified SEB of claim 4 wherein Asn at 23-position in the amino acid sequence of SEB as shown in SEO ID NO: 1 is substituted with Tyr.

- 15. (Currently Amended) The modified SEB of claim 5 wherein Asn at 23-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1 is substituted with Tyr.
- 16. (Currently Amended) The modified SEB of claim 6 wherein Asn at 23-position in the amino acid sequence of SEB as shown in SEQ ID NO: 1 is substituted with Tyr.
- 17. (Currently Amended) The modified SEB of claim 7 wherein Asn at 23-position in the amino acid sequence of SEB \underline{as} shown in SEQ ID NO: 1 is substituted with Tyr.

Claims 18-20 (Cancelled).

21. (Currently Amended) A modified Staphylococcal enterotoxin B (SEB) having a reduced reactivity with a neutralizing antibody to SEB (anti-SEB antibody),

capable of being expressed in a soluble form in E. coli to be maintained stably in an aqueous solution and that retains a therapeutic effect to immunopathy equivalent to that of naturally occurring SEB,

wherein the reactivity with anti-SEB antibody is reduced by introducing in the amino acid sequence of SEB as shown in SEQ ID NO: 1 an amino acid substitution from Lys at 226-position to

Lys at 229-position of Leu Phe Ala Ala, Ala Thr Thr Gln or Lys Arg Ile Ile, and

wherein Asn at 23-position is substituted with Tyr.

- 22. (New) A remedy comprising the modified SEB mutant N23Y or 47C7 or 4C1 wherein said mutants have reduced binding to an anti-SEB antibody and wherein said mutants produce inhibitory cytokines at higher levels compared to the production of inflammatory cytokines as compared to wild type SEB for treatment of rheumatoid arthritis.
- 23. (New) In a method for the treatment of rheumatoid arthritis comprising administration to a patient in need thereof an effective amount of a treatment agent, the improvement wherein the treatment agent comprises the modified SEB of

the treatment agent comprises the modified SEB of claim 21.